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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/892,981	06/27/2001	Roland Gerritsen van der Hoop	01722906	3783

7590

08/25/2004

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EXAMINER

HUI, SAN MING R

ART UNIT	PAPER NUMBER
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1617

DATE MAILED: 08/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/892,981

**Applicant(s)**VAN DER HOOP, ROLAND  
GERRITSEN**Examiner**

San-ming Hui

**Art Unit**

1617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3,8-14 and 20-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,8-14, 20-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 12-17-2003.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 16, 2004 has been entered.

Claims 1,3,8-14, 20-23 are pending.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 9-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 9 is depending from a cancelled claim. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1,3,8-14, 20-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaswan et al. (US Patent 5,639,743) in view of Carrara (US Patent 5,891,462) and Merck Index (11<sup>th</sup> ed., 1989, Monograph 5103).

Kaswan et al. teaches a method of administering androgen, such as methyltestosterone, and estrogen, such as estradiol, to treat vaginal gland atrophy in post-menopausal women to restore adequate amounts of exocrine gland fluid (See claims 1, 8, and 13, col. 4, line 50 to col. 5, line 5, col. 6, 63-66, and col. 7, lines 14-15). Kaswan et al. also teaches topical transdermal estradiol administration can minimize the first pass hepatic effect and that the recommended dosage administered as 0.3-1.25 mg per day (see col. 7, lines 56-60 and col. 8, lines 2-4). Kaswan et al. also teaches the dosage of oral methyltestosterone as 2-50mg per day (see col. 6, lines 63-66).

Kaswan et al. does not expressly teach the specific dosage forms of methyltestosterone and estradiol. Kaswan et al. does not expressly teach the herein claimed ingredients of the estradiol gel such as polyacrylic acid, triethanolamine, ethanol and isopropyl myristate. Kaswan et al. does not expressly teach methyltestosterone and estradiol being administered in sequential or simultaneous manner.

Carrara teaches a gel composition containing estradiol and the herein claimed ingredients (See claim 5). Carrara also teaches such composition has enhanced penetration for the active such as estradiol (See col. 4, lines 31-36; also col. 3, line 51-64). Carrara also teaches that it is conventional in the art that in order to overcome the

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barrier of the stratum corneum and facilitate percutaneous absorption, penetration enhancers are employed (See col. 2, lines 53-60).

Merck Index teaches isopropyl myristate is a penetration enhancer.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the gel of Carrara and the herein claimed oral dosage forms of methyltestosterone to treat vaginal atrophy in menopausal women. It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ methyltestosterone and estradiol in sequential or simultaneous manner.

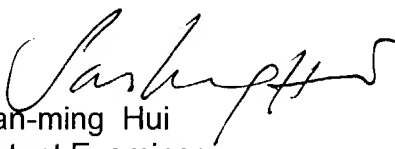
One of ordinary skill in the art would have been motivated to employ the gel of Carrara and the herein claimed oral dosage forms of methyltestosterone to treat vaginal atrophy in menopausal women. Employing the estradiol gel of Carrara in the method of Kaswan et al. would have been reasonably expected to be effective since the estradiol gel of Carrara is effectively enhancing the penetration of estradiol when percutaneously administered. Incorporating isopropyl myristate, a well-known penetration enhancer, into Carrara's gel would be considered obvious as selection over the obvious alternative.

One of ordinary skill in the art would have been motivated to administer methyltestosterone and estradiol in sequential or simultaneous manner. The optimization of result effect parameters (e.g., dosing regimens) is obvious as being within the skill of the artisan.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to San-ming Hui whose telephone number is (571) 272-0626. The examiner can normally be reached on Mon 9:00 to 1:00, Tu - Fri from 9:00 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan, PhD., can be reached on (571) 272-0629. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
San-ming Hui  
Patent Examiner  
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